Bulinus forskalii cernicus (Morelet)

1867 *Physa cernica* Morelet, Journ. de Conch. Vol. 15, p. 440. (Mauritius.)

1880 *Isidora forskalii* Ehren. E. v. Martens, Mollusken Mauritius u. Seychellen, p. 210.

SPHAERIUM SCOPOLI; SULCASTRUM, NEW SUBGENUS, AND S. FALLAX, NEW SPECIES

BY V. STERKI

S. sulcatum Lam. holds a peculiar position. It has been grouped with the subgenus *Cyrenastrum* Bgt., i. e. with *solidum* Normand and most of the nearctic Sphaeria. S. Clessin, in his monograph of the "Cycladeen", 1879, placed it under the subgenus *Sphaeriastrum* Bgt. with *S. rivicola* Leach. It is remote from both groups, and represents a subgenus for which the name *Sulcastrum* is proposed. The differences are mainly in the surface sculpture, constant in all of its forms, and wanting in all other Sphaeria. It is densely, microscopically rugulose, dullish all over; the striae, or costulae, are fine, sharp, crowded, regular to subregular; also, the nepionic young are considerably larger. All of this could mean just specific differences; but, with a great amount of material at hand, it appears that *sulcatum* is not only a species very variable, but a group: there are some forms constantly different and distinct, *ergo* species. Two have been described: *S. crassum*, in the NAUTILUS XIV, p. 140, 1901, and *S. lineatum*, ibidem, XXIII, p. 142, 1910; another is described below.

Sphaerium fallax, n. sp., differs from *sulcatum* as follows: The beaks are more anterior, broad; anterior margin r. abrupt to subtruncate, the posterior part markedly

[1] See Pilsbry & Bequaert, 1927. Bull. Am. Mus. Nat. Hist. Vol. 53, p. 133, for a complete statement relative to the status of *Isidora* and *Bulinus*.

longer, attenuate, its dorsal margin passing into the posterior by a more or less marked angle, the posterior end rather angular, well below the median line; the ventral margin slightly curved to nearly straight; the surface is much like that of *sulcatum*, the riblets generally finer and more crowded, somewhat scaly, imparting a slight silky gloss; there are several well marked rest-lines; the hinge is rather slight, with the anterior laminae shorter; the nepionic young are large; dimensions, see below.

Distribution: Region of the Great Lakes, generally more northern, mostly in lakes of northern Michigan and Wisconsin (and probably in Minnesota, etc.).

S. fallax is much like *sulcatum*, and it took years and specimens from many places to justify establishing the species. But when once familiar with it, one can discern them almost at a glance. Be it mentioned that the specimens from one habitat are fairly uniform, as it is with most Sphaeriidae. As a whole, the species is decidedly variable, as to size and shape, extreme forms are quite dissimilar, but connected by intermediate grades. It appears to be in place to cite a few lots in our collection as examples.

The first specimens noted as different and apparently distinct from *sulcatum* were from Mountain Lake, Marquette Co., Mich., collected by Dr. Bryant Walker, in 1898 (No. 1644), and subsequent years; 13-15 mm. long, with the beaks very little prominent.

No. 12514[1]: Ontonagon River, west branch, Gogebic Co., Mich., collected by Joe E. Morrison, in 1929; average large, 19:14:12.5 mm. with the beaks prominent; one was 22 mm. long.

11786: Schlatter's Lake, Keweenaw Co., Mich., received from Dr. Walker, in 1928, small, short, but well formed, 13-14 mm. long.

10933: Whitefish Point, Chippewa Co., Mich., collected

[1] The numbers cited are of the special collection of Sphaeriidae, in the Carnegie Museum.

by Wm. J. Clench, in 1915, per Museum of Zoology, Univ. of Michigan; markedly elongate, about 18 mm. long.

12502: Palmer Lake, Vilas Co., Wis., collected by Joe E. Morrison, in 1929; 16 mm. long.

11602: Chautauqua Lake, N. Y., collected by Dr. F. C. Baker, in 1927, rather short form, 15 mm. long; a rather southern station.

Even as restricted, *S. sulcatum* is still very "variable". E. g., there is a form: very large, 20-23 mm. long, of well rounded outlines, strongly and evenly inflated: this is probably what T. Prime had named *giganteum*. Specimens are in the M. C. Z. collection, and probably in others, from the Hudson River, the Holston River, from Hull, Quebec: Nepean, Ont. Another extreme form, *planatum* St., small, e. g., 13:9.5:6.5 mm., slightly inflated, with the peripheral parts of the valves flat, shell and hinge very slight, color light grayish: from northern Indiana, Michigan, etc., the two, side by side, would be taken for distinct species. And there is one, apparently a regional subspecies, which had been named in manuscripts for many years *dakotense:* of medium size, r. rounded-elliptical, beaks rather median and little prominent: color, dark reddish brown: from Wisconsin and Minnesota to Dakota. There are a few others, more different, with possible claims for specific rank, each represented by several entries, waiting for additional evidence as to their standing.

NEW AND PROBLEMATIC WEST AMERICAN LAND-SNAILS

BY H. BURRINGTON BAKER

This paper is mainly founded on land-snails which were collected during a trip to the Pacific States in the summer of 1929. Because of its anatomy, *Macrocyclis hemphilli* W. G. B. from Washington and Oregon is removed from *Haplotrema* (Haplotrematidae) and made the monotype